

DECEMBER 1985

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THE IDAHO IBM-PC USERS GROUP NEWSLETTER

Vol.1 No.10

The Idaho IBM PC Users Group
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Idaho IBM-PC Users Group Newsletter

Vol 1 number 10

December 1985

NEXT MEETING

Date : Tuesday, November 10
(the second Tuesday)

Time : 7:00pm

Place: Borah High School
: B-Wing Room 117

Next Meeting will feature demonstrations on some of the latest in available hard-disk technology.

First, Suzi Coffin, intrepid salesperson from Compushop here in Boise, will show us how easy and convenient it is to install and use The Hardcard from Plus Corporation. The Hardcard is a 10Meg Hard-Disk on a plug-in card. (The 20Meg unit will soon be available to the local market also). After the demonstration, Suzi will answer general questions pertaining to the unit.

Next, member Rod Peterson will demonstrate the dual drive Bernoulli Box from Iomega Corporation. He'll clue us in on the pro's and con's of this setup, and answer questions pertaining to its operation and advantages from the standpoint of a small business manager and hobbyist.

Following these demonstrations and a minimal amount of group business, we hope to move right into Random Access. This is the period where everyone may mix, question our advanced members, and get any needed software from our extensive Public Domain Software library. Since Allen Powell has agreed to become our new software librarian, I'm hoping to have more opportunity to rap with our members and answer questions for those who are visiting us for the first time. Till then...

THE NOVEMBER MEETING

By: Rich Chambers

I consider a meeting a success if it seems that most everyone there has learned something. Using this criterion, November's Group meeting was highly successful. There was information for all, from the novice to advanced users.

Bob Flagg gave us some insight into the making of file squeezing programs, and we all came away with an improved understanding of the process. There were many intelligent questions and comments generated during this discussion, and I could see that he had managed to reach the advanced members and a considerable portion of our new to intermediate users.

Herb Jensen, our accounting expert from BSU, then demonstrated a graphics package called DIAGRAPH. Forewarned is normally forearmed, and he had advised me that this was a SLOW program, but this was, without doubt, the slowest graphics program I've ever seen! The program features many fine options and super graphic detail, however, changes in graphics took what seemed like eons
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THE LIBRARY CARD
by Allen Powell

Some of you may be surprised to see that this column is no longer being written by Rich Chambers. Due to Bob Robles imminent departure from our group, state, and sanity for the sunshine of California, Rich has taken over as editor of this newsletter. As many of you may know, Rich is a man of many talents including an ability to keep the fires burning under several projects at one time and have them all turn out as if he had devoted his entire energy to each one. Well, there are just so many balls even someone like Rich can keep rolling and still have time left over to diddle their computer as much as they'd like; so when he asked if I'd care to take over the club disk library I was more than happy to be able to give him a hand.

Since I've mentioned Rich and Bob, I'd like to take this opportunity, at the end of the club's first year, to thank each of them for the time and energy they both have extended in bringing this group to life and nursing it along.

Now back to the matter at hand. I intend to continue with the disk copying and library policies presently established by Rich, though I won't be quite as accessible as he previously was. The library will be available weekdays from 5 pm to whenever, any time weekends, and of course at the club meetings. I'm a little closer in than he is, so getting that program you need will be more convenient than ever. My address is:

Allen Powell
2501 No. 32 nd
Boise 385-0070

If you have any questions, requests, or programs to add to the library; just give me a call.

I haven't any program review this month due to the library's acquisition of 135 more disks of public domain and "freeware" programs. Seems a fellow made Rich an offer he couldn't refuse, but at 6 bucks for the set, even I wouldn't have of passed up the deal. I'm in the process of entering both this set and our old library into a data base program in hopes of weeding out the duplications and hopefully making the combined master library easier for me and you to find what we're looking for. Also, it gives me an excuse to play with my system some more! I hope to have a revised catalog available by the January meeting.

See you at the meeting and if I don't, have a **MERRY CHRISTMAS** and a **HAPPY NEW YEAR!**

D I S C O U N T S

The following individuals and local merchants are offering discounts to all **registered** members.

Entre' Computer Center is graciously offering a firm 15% (and even up to 20% depending) discount on **ALL** stock in the store.

CompuShop is offering a 10% discount off the normal CompuShop retail price on all stock to registered IPUG members.

Bruce Burns (R&L Data) is personally extending a 15% discount off everything in the store, except the AT line, to all registered members. Note: you must deal directly with Bruce.

Borbaki Inc. will sell their Directory Command System called 1Dir (pronounced wonder), which normally retails for \$95, for \$75 to club members. Thanks to Chris & Cindy.

NEW USER'S NICHE

Mini-Tutorial: DOS FORMAT COMMAND

By Rich Chambers

Here's the first in a series of Mini-tutorials on IBM (MS) DOS. We intend to direct these sessions toward the new to intermediate user level, however, it's hoped that everyone will eventually reap some benefit from it. This time, we explore the external DOS Utility, FORMAT.COM. (DOS2.1 Manual, pages 2-89 through 2-95.)

The diskette you purchase from the computer store, or from the User Group inventory, is blank magnetic material with no tracks or sectors laid out for the computer to read and write to. (Much like a blank tape for your tape recorder.) In fact, if you were to try to utilize the diskette in this form, the computer's disk drive would just sit there spinning, unable to find a starting place to read.

Enter, the DOS Utility program, FORMAT.COM. This utility is used to transform the diskette into a form which the computer can deal with. FORMAT accomplishes this by writing tracks and sectors on the diskette electronically. Thus, if you FORMAT one of your already formatted disks, the FORMAT program obliterates whatever data was there before, as it writes brand new tracks and sectors right over the top of data previously on the disk.

Ok, let's use the format utility to initialize a diskette:

A> FORMAT B:

This is the simplest method to format the diskette in drive B: from drive A:. In order for this command to work, however, the program FORMAT.COM must be on the diskette in drive A:. DOS will check the directory for drive A: and if the

program FORMAT.COM is found, will run the program, telling the program that the disk to be formatted will be in B: drive. The FORMAT program will then prompt you to "Place the diskette to be formatted in Drive B: --then press any key."

When this is accomplished, the rest is automatic. The program advises you that it is formatting the disk, and upon completion, prints a completion message coupled with a disk space message. Following this, the program asks whether you wish to format another diskette. If you answer "y" or "Y", the process begins anew. Otherwise, you are returned to DOS.

For you folks with only one floppy drive, the following command will format a diskette in A: drive:

A> FORMAT

In this case, the format program will prompt you as to when you should insert the diskette to be formatted--the other steps remain the same.

As is the case with many DOS programs and utilities, there are parameters you may pass which instruct FORMAT.COM to perform different tasks. These parameters are: /V, /S, /B, /1, /8. (Remember that we are talking about DOS 2.1 here. DOS 3.0 and above have other parameters available.)

When the /1 parameter is used, the diskette is formatted for single sided use only. (The default is Double-sided, 9 sectors per track).

A> FORMAT B:/1

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NEW USER'S NICHE

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If the /8 parameter is chosen, the diskette is formatted for 8 sectors per track. The /V command MAY NOT be used with this command.

A> FORMAT B:/8

The /S parameter causes the hidden DOS System files (IBMBIO.COM, IBMDOS.COM) as well as COMMAND.COM to be copied to the disk as part of the FORMAT sequence. Thus, a portion of the available disk space is taken up for system file use.

A> FORMAT B:/S

If we wish to name the Volume, we add the /V parameter, and the FORMAT process is modified to allow us to enter a name for our newly formatted diskette. The Volume name may be up to 11 characters long for DOS 2.1.

A> FORMAT B:/V

The /B Command is a bit different. If we utilize this command, the diskette is formatted with 8 sectors per track, and space is allotted on the diskette for any DOS version below DOS 3.0 to be placed upon the diskette at a later time. **NOTE:** You MAY NOT include the /S or /V parameters with this parameter.

A> FORMAT B:/B

The following FORMAT command is often used when formatting a system diskette for DOS 2.x:

A> FORMAT B:/S/V

This command uses the default values (double sided and 9 sectors per track) to FORMAT the diskette in drive B:. In addition, we are transferring the three system programs and will also name this disk volume during the FORMAT process.

Note: If FORMAT.COM finds defective tracks on your diskette, it marks those areas so that they are not used by DOS to store data, and a message is printed which advises you of the amount of unusable disk storage it has found.

ITEMS TO REMEMBER:

1. FORMAT destroys any data previously on the disk.
2. Always use considerable caution when running the FORMAT Utility. A momentary lapse in attention may result in erasing important data. It's QUITE simple to destroy all the data on your hard disk!
3. NEVER open the drive door while its red light is on!

That's all for this time. Our next journey into the world of DOS will focus upon the many uses of the versatile COPY command.

----- WHERE TO WRITE

Idaho IBM PC Users Group
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Boise, Idaho 83707

Questions concerning the group can be directed to any of the following people:

Editor:Bob Robles	342-7250
Editor:Richard Chambers	939-9120
Librarian:Allan Powell	385-0070
Treasurer:Tom McIntyre	344-7194

You can also communicate with us via the IBM-PC SIG (Special Interest Group) on Gem State Data Access BBS at 375-2224

A SIXPACK PREDICAMENT

By Rich Chambers

What do you do when your AST SIXPAC+ stops keeping the correct time and date? Let's do some quick and easy troubleshooting.

1. Use the ASTCLOCK program with the /R parameter and reset the clock to the correct time and date, then type Ctl-Alt-Del to reset your computer to start-up. If the time is still correct, go to step #2. If not, proceed to the last paragraph.

2. Turn off the IBM's power switch. After about a minute, turn the switch back on and, assuming that your autoexec.bat file normally runs the astclock program, check the time again. If it's not correct, you probably have a bad battery.

"Darn!," you mutter, "Guess I'll have to take this computer to a repair shop to get the blasted battery changed," as the vision of megabuck repair bills dances through your mind.

But wait a minute! If you are even the slightest bit mechanical, you may easily perform the battery changing operation yourself. All that's required is a bit of caution, and some attention to detail.

First, TURN OFF THE POWER, and unplug the computer. With this accomplished, pull the CPU chassis out where you may easily reach the screws on the back, and remove the five cover screws on the backplate. These may be found at the lower and upper rear corners, and in the top center portion of the backplate. When this is done, carefully slide the CPU Chassis cover forward and remove it from the CPU. Now, gently remove any cables which are connected to the AST SIXPACK board.

The AST card should now be removed. This portion of the operation will require considerable care. (If you have an anti-static mat, touch it momentarily, to remove any residual static electricity you may be carrying.) Now, remove the screw which holds the card in place. This screw is located at the top back of the card where it connects to the backplate, and is easily accessed. Carefully grasp the card at the metal end (where the screw was) and the other end, taking care not to touch any of the integrated circuits on the board (beware, static electricity can harm these integrated circuits) and, with a gentle rocking motion, pull the card from the CPU and place it upon your work area.

The battery is the round silver unit, normally located toward the center-bottom of the card. With a small screwdriver, gently remove the battery from the spring clip holder. (Remember not to touch the Integrated Circuits.) The AST manual has an excellent description of the battery removal process.

Now, take the 3 volt battery to the business of your choice and get a replacement. When you return, gently slide the new battery into the spring clip, then reverse the removal process to re-install the card in your computer.

When you have replaced the card and CPU cover, and re-connected the cables, it's time to turn on the computer, reset the time/date with ASTCLOCK, and redo steps #1 and 2 above. If all is well after step 2, you are done, and you may allow yourself a few moments gloating over your newfound ability.

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ADVANCED dBASE TIPS

By Dave Jameson

dBASE II Ver 2.4 Running under IBM MSDOS 2.1 or Columbia MSDOS 2.11 has an internal error in the way it reads the International character set. Because of this, dBASE may very suddenly lose the end of file marks in your DBF files. The telltale sign that this has happened is: You will find pure "garbage" in a DBF record. This, however, is not always the case. Another indicator is: although fields in the records look fine, you cannot access, list, or display records after a certain point, even though those records can be displayed on the screen by the Edit command. Display Structure indicates the records are there also.

The records after the trashed one can be saved in the following manner:

1. Copy to a temporary DBF all records that can't be accessed.
2. Delete and pack the original dbf. This will remove the bad record and all following it.
3. Append the records in the temporary DBF to the original DBF.

This fix is only temporary, for if you run dBASE II Ver 2.4 under MS DOS 2.1 the problem will probably occur again.

Ever wondered why the last few lines of one of your .PRG files suddenly disappear. The problem is that if the last 512 byte block of the .PRG file contains less than 128 bytes, dBASE II Ver 2.4 Loses its end of file markers. Here's the technical patch supplied by ASHTON-TATE on FEB 2, 1984 to solve the problem permanently.

"dBASE II 2.4 under MSDOS will not read the last 512 byte block of

a text file such as a .PRG file when the last block contains less than 128 bytes. Consequently, certain errors will arise when running dBASE II 2.4. Some that have been reported are listed below:

Syntax errors at the end of the Command file. The error message "Command file cannot be found" displays when attempting to "DO" a Command file. Command execution stops unexpectedly and returns to the Dot Prompt. The RUNTIME Version Does Not "CRUNCH" Command files completely.

The following patch will correct this problem under MSDOS for dBASE.COM only. It will not correct the problem in dBRUN.COM. This patch assumes both DEBUG.COM and dBASE.COM on Drive A.

```
A> DEBUG DBASE.COM - E5662
1028:5662 0A.E9 C0.3D 75.21
-E77A2
1028:77A2 00.3C 00.03 00.74
00.04 00.08 00.C0
1028:77A8 00.75 00.03 00.E9
00.B9 00.DE 00.E9
1028:77AE 00.D4 00.DE
-W
WRITING 7E00 BYTES
-Q
A> "
```

If you feel uneasy about permanently modifying your original Command files, you can do what I do. At the end of each of your .PRG files, have several lines of comments. I do the following:

```
*****
*****
*****
*****
```

Then if the end of the file is chopped off, I haven't lost any of the executable program. If you do
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ADVANCED dBASE TIPS

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this; remember that these comment lines could disappear if the file is modified many times, as whenever the last 512 byte block contains less than 128 bytes a few lines are eaten away.

If you delete records from a .DBF file, the empty space is not reclaimed by DOS when the .DBF is packed. In order to reclaim the space, do the following:

1. Copy the newly packed .DBF to a temporary .DBF
2. Delete all records in your original .DBF. You should do a quick peek at the temporary .DBF to make sure all files were copied over.
3. Append the temporary .DBF to your original .DBF
4. Delete the temporary .DBF

dBASE'S SET CALL Command allows the programmer to incorporate machine language routines in his program files. The following example of the set call command goes into DOS, gets the DATE and TIME and assigns it to memory variables. This would be an excellent routine to add to programs where you wanted the DATE and TIME automatically printed on any reports you generated.

The routine uses function calls 2A and 2C within interrupt 21H. Before going any further, I should define function calls and interrupts. These are small locations within your read only memory that are set aside to do various routines. The first 1024 (400H) Memory Locations in the 8086/8088 are reserved for interrupt vectors. Programs may change the contents of these vectors and each program can have its own way of handling a par-

ticular interrupt or function call. MSDOS channels most of its function calls through interrupt 21H. The high byte of the a register (or AH) is used to distinguish one function call from another. There are about 100 different function calls that a program can do. It happens that within these 100, function call 2A gets the system's day, month and year and call 2C gets the system's hour, minute, second and 1/100 second. For function call 2A, the year is stored in the CX register and the month and day in the DX (The high byte or DH stores the month and the low byte or DL the day). If the function call is 2C, the hour and minute is stored in the CX register (The high byte or CH stores the hour and the low byte or CL the minute), and the second and 1/100 second in the DX (DH stores the second and DL the 1/100 second). After getting these values, we assign them to memory variables and print them as part of your report. You could also store them in a .DBF for later access.

The source code for the machine language routine is:

```
MOV AH,2A
INT 21H
MOV DX,DAY-MONTH
MOV CX,YEAR
RET
```

This translates into the dBASE command:

```
POKE 61440,180,42,205,33,137,
    22,13,240,137,14,15,240,195
```

This looks scary, but all I have done is compile the source code, change the machine language routine to its decimal equivalent and put it into a empty area of RAM beginning at decimal 61440 (Actually since the
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ADVANCED dBASE TIPS

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top of dBASE II is 56728, any entry point between that and 65535 is available).

To move the TIME and DATE from the CX and DX registers, we use the peek command which looks at memory locations where the CX and DX registers are stored and the store command to store what's there to memory variables. These locations are 61456 for CH, 61455 for CL, 61454 for DH and 61453 for DL. Finally, the routine has to be done twice because the D and C registers are used for both DATE and TIME. First we will get the DATE with call 2A (Decimal 42) and store it to memory variables. Then the TIME with call 2C (Decimal 44) and store it to a different set of memory variables. Only one final twist remains. The YEAR is in binary format so we have to convert it to Julian format.

The total .PRG file would be:

```
SET TALK OFF
SET ECHO OFF
ERASE
* FIRST GET THE DAY, MONTH AND YEAR
POKE 61440,180,42,205,33,137,22,13,
    240,137,14,15,240,195
SET CALL TO 61440
CALL
STORE PEEK(61456)*256+PEEK(61455)-
    1900 TO YEAR
STORE PEEK(61454) TO MONTH
STORE PEEK(61453) TO DAY
* NOW GET THE TIME
POKE 61440,180,44,205,33,137,22,13,
    240,137,14,15,240,195
CALL
STORE STR(PEEK(61456),2) TO HOUR
STORE STR(PEEK(61455),2) TO MIN
STORE STR(PEEK(61454),2) TO SEC
STORE STR(PEEK(61453),2) TO HUND
* PRINT IT TO THE SCREEN
@ 10,5 SAY 'HOUR ' + HOUR
@ 10,16 SAY 'MIN ' + MIN
@ 10,26 SAY 'SEC ' + SEC
* AND WE FANCY UP THE DATE
```

```
STORE STR(MONTH,2)+'/'+STR(DAY,2)
    + '/' + STR(YEAR,2) TO DTE
@ 9,9 SAY 'DATE ' + DTE
```

Now, once you set the DATE and TIME in DOS, you can find out what time it is by running this program.

One final note, this program should be machine independent since function call 2A and 2C within interrupt 21H is common to all versions of MSDOS 2.0.

Note: Dave will be writing this column as often as his hectic work schedule allows. Advanced dBASE II questions should be directed to THE QUERY COLUMN, and we'll get them to Dave for disposition. Ed.

TECHNICAL WRITERS

We now have these writers contributing informational columns for our newsletter.

Rich Brown Systems Analyst
Richard Chambers Computer Consultant
Bob Flagg Programmer/Analyst
Mike Hayhurst ... Systems Programmer
Kay Allphin Systems Analyst
Mark McNee ... Programmer/Technician
Allan Powell Computer Hobblist
Judy Robinett Computer Hobblist
Tim R. Wolf Systems Programmer

We are quite fortunate to have these folks donating their expertise to our PC group.

LOTUS 123
VERTICAL TABLE LOOKUP
AND MORE MACROS.

by Tim R. Wolf

In the October issue of IBM User's Group Newsletter, I described basic macros which would aid you in everyday processing. In that article, I hinted at the capability of Lotus to process 2 dimensional arrays within the spreadsheet. The specific example was a payroll program which would have input consisting of the number of hours that the employee has worked and an entry for any unusual deductions during that pay period; the program would then access published tax tables to calculate the proper tax for a given gross pay and deductions. Due to space restrictions, these "vertical table lookups" were not addressed.

Vertical table lookups are simply 2 dimensional tables that reside in your spreadsheet. Like I have mentioned before, the Idaho State tax tables are a good example. The following is the Tax table:

INCOME	FIXED TAX	PERCENTAGE
0	0.00	0.020
1,000	20.00	0.040
2,000	60.00	0.045
3,000	105.00	0.055
4,000	160.00	0.065
5,000	224.00	0.075

Vertical Table lookup allows us to access the table with variable data-- thus giving intermediate values which can be used in further calculations or output.

The format for Lotus' Vertical Table lookup is:

@VLOOKUP(X,RANGE,OFFSET)

Where X is, in our example, the adjusted yearly income of our tax victim. When Lotus begins its table lookup, it looks for a value in the

table that is larger than X. Once it is found, it looks one row above. For example, if the adjusted yearly income was \$3,550, then Lotus will look on the \$3,000 row.

The RANGE is the tax table range which includes all columns and rows. Ideally, you should Range Name the entire table a meaningful name (ie, STATETBLE) so your formulas are easy to read. (For that matter, Range Name all of your major values; the cell that contains the adjusted yearly income ought to be Range Named "INCOME".)

Finally, the OFFSET is how many columns to the right you should look to grab a value. The key here is that the first column is number zero, the second is column one and the third is column two (etc). A concrete example is:

@VLOOKUP(INCOME,STATETBLE,1). If this was typed in cell B11 for example, the value returned would be equal to \$105.00 - or the FIXED Tax for a \$3,550 tax bracket. Notice how the Range Names make the formula readable.

You are not restricted to using the Lookup formulas by themselves in a cell; they can be combined with any other function, statement or IF clause.

To continue the example, Idaho State Tax tables start out by taking the person's income (on a bi-weekly payperiod) and multiplying it by 26 weeks - giving an annual income base. Next subtract out allowable deductions (@ \$1,000 each) giving the adjusted taxable income. Then, using the Vertical Table Lookup, find the FIXED ANNUAL TAX, which is the amount you always get taxed in that income bracket.

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REVIEW: QMODEM
By: Mike Hayhurst

I hope all you folks who ski are enjoying the snow. For me a warm fire and my PC will do just fine. As I stated last month I would like to introduce you to an other free-ware communications program. This program is QMODEM and is authored by John Friel III from the FORBIN PROJECT.

As of this date the most current version of QMODEM is 1.11 and like most good software it continues to be enhanced as time goes on. This version supports many very useful functions and is at the top of the list when it comes to file transfer. But all of this does come at a price. This communications program uses about 192k and that may cause some to take exception. The bottom line is that function is not free and one must operate within the limits they have set for themselves.

When you first bring up QMODEM you get the usual logo type of screen that has the version info and author's note about voluntary payments of \$20.00. It should go without saying that if you really like the product it will be worth your time to send the author the modest price he asks. You will get support for problems and be kept informed about changes that are being made. The program then looks for some files it needs like window definitions, function key definitions, dialing directory, and communications options. If these are not found it creates a default set.

By pressing the HOME key a help screen will appear. It defines the uses of the keyboard, and by pressing the space bar a second set of key definitions will appear. At first you will see a strong resemblance to PCTALK. This is no accident, since PCTALK has a lot

going for it and has a large following. The help screens will appear as windows and can be removed from view by either pressing HOME again or just selecting the next function key.

You will immediately see that the screen is usually controlled through a set of windows. These windows help to make the menus easy to read and the placement and colors can be defined as you see fit. You can save your changes to disk so they will always be there or you can make the changes last only as long as the program is running.

Another set of defaults which may be controlled are the communications parameters. Here you can set the default speed, parity, and number of data bits. QMODEM supports speeds of up to 9600 bps, all forms of parity and either 7 or 8 data bits. You can even turn on constant CTS (Clear To Send) and take advantage of error correcting modems during file transfer.

The file transfer of QMODEM is unequalled by any in terms of effective data throughput. It can transfer about 88 blocks of 128 bytes each every minute. That compared to about 60 per minute with PCTALK and other communications programs. This rate is at 2400 bps and using XMODEM protocol. When using error correcting modems and QMODEM's IMP protocol it is possible to achieve about 98% of rated baud rate while other methods can only achieve about 75% to 80%. It does however require both ends of the file transfer be using QMODEM 1.11 or higher and error correcting modems. When making long distant phone calls every bit helps to save a buck.

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REVIEW: QMODEM

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To invoke file transfer either press PGUP or PGDN for upload and download respectively. You will be given a window asking which form of protocol to use;

- (1) ASCII
- (2) XMODEM
- (3) XMODEM-CRC
- (4) RELAXED-XMODEM
- (5) IMP

There is no need to remember the '=x' that must be appended to the file name with PCTALK. XMODEM-CRC is just an enhanced version of XMODEM. It makes use of a better algorithm for determining if errors have occurred. This improves the error correction from 99.6% to about 99.98% reliability, but needs both ends to be able to support CRC. The RELAXED-XMODEM was designed especially for use with COMPUSERV and should only be used there. The IMP mode is one that assumes the all error correction is done by the modems and is capable of the highest rate of data throughput. As you can see QMODEM has a wide selection of file transfer methods and the highest level of throughput to boot.

You control most the defaults used in communication and file transfer with the ALT-F. It allows you to set the controls for the modem, the auto dial sequence, default disk drive and subdirectory for receiving and sending data from, and messages you receive when communications is established. The defaults such as these can be changed for the present session only, or may be saved to disk until the next time you choose to change them. For those of you who need to toggle back into DOS without losing the communications facility, a DOS SHELL has been provided.

Like PCTALK there is a translate

table that allows you the ability to replace any of the 256 possible ASCII codes with your choice of a substitute. This, however, is implemented slightly different than PCTALK. Here, XON/XOFF is still responded to as it is seen on the communication line. This has its pros and cons. The XON/XOFF is used as a flow control and when XOFF is received you must press ALT-Q to start flow moving again. This can be a real pain when communicating with a host that sends it out with every exchange of messages.

There are other features such as the ability to change Subdirectories on the fly, view or delete a data set, or toggle ECHO on or off. Most have been defined in the help screens, and more documentation is included on disk. The auto-dial directory is more than adequate, in that it contains 200 entries. Each entry contains a brief name, phone number, default speed, parity, and number of data bits to be used. This directory, like PCTALK allows prefixes, so in-house PBX, or other phone services can be used without difficulty.

My highest praise for this product is for its simplicity and ease of use. In this, it is better than PCTALK or any other program I've used to date. If you have the 192k it takes to run it; QMODEM is well worth the time it takes to test drive it. It is not the total answer for everyone, but I don't think there is such a thing. All situations should be evaluated, and based upon its results, a better choice can be made. I still use PCTALK and will soon be looking at PROCOMM, but for now I give my preference to QMODEM. For a copy of QMODEM 1.11 contact myself or our Librarian, Allen Powell.

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THE QUERY COLUMN

Address your questions to:

The Query Column

P.O. Box 9137, Boise, ID 83707

Query:

I often find extra files on my disk which have the same name as others I have worked on, except for the extension (which is .BAK). I know I didn't put them there, why are they there?

BOISE

Return:

I don't know what software you use, so I'll guess your using WordStar or Edlin to create and edit files. Both cause a backup (.BAK) file to be placed on the disk. What really happens is: These software packages first rename the original file to {filename}.BAK, then save the file you have just edited under the old filename. This, in turn, allows you to keep a copy of the file on disk in it's original form. If you no longer require the original data, you may erase the backup file and reclaim the disk space.

Rich Chambers

Query:

Why is it that I cannot run some files on my diskettes by typing the filename?

MERIDIAN

Return:

DOS is only able to "run" three types of file from the Command Line. These are files with the .BAT, .COM, and .EXE extensions. Files, other than these, must be read, compiled, or interpreted in order to be used. If you wish to "run" a file which has a .BAS extension, you must first invoke the basic interpreter. The following command will run a BASIC file (called TEST.BAS) on drive B: from drive A: (where BASICA.COM is located):

A> BASICA B:TEST

Notice that it's not necessary to include the .BAS extension in this command.

Rich Chambers

LOTUS TIPS, TRICKS AND TECHNIQUES

BY KAY ALLPHIN

Here's a Lotus tip I discovered one day quite by accident. I don't know; it may be documented somewhere, but I've never seen it. To "zoom" right to the next screen, press the CTRL key then the right arrow key; to go left one screen, press the CTRL key with the left arrow. This has really been a handy shortcut for me, hope you find it useful!

In case you don't subscribe to Lotus magazine, or have not had time to read the November 85 issue, here's a good tip. To randomly exclude a column when printing a specific range, select /Print Printer Options Borders Columns and point to the column you wish to hide. Then designate the columns to the right of the unwanted column as your print range.

Another tip that I don't believe I've seen documented is for both 1-2-3 and Symphony users who have printers with graphics capability. By using the DOS GRAPHICS command, you can create screen prints that are identical to the actual screen. This method makes excellent screen representations for fast documentation purposes, and also provides a quick way to produce quick graphs without PrintGraph.

Kay is a highly qualified systems analyst at MK, and a most welcome addition to our cadre of technical writers. ED.

YOUR BBS

Our group maintains the Gem State Data BBS IBM-PC SIG. There are about 50 programs available for downloading. Data line 375-2243.

THE NOVEMBER MEETING

(continued from front page)

to make it to the screen. According to Herb, written documentation is also quite sparse, and you must rely heavily upon tutorials to teach you the in's and out's of the program.

If you need a program which allows you to create high quality graphics, have a hard disk, and production time is NOT a factor of concern, you may wish to take another look at this package.

A discussion on the newsletter then followed. Over the past few issues, we've allowed it to expand. This expansion is primarily due to:

1. An increase in the number of high-quality writers who have joined our ranks. (Many are writing monthly columns, while others have offered to make such contributions as their busy schedules allow.)

2. Additional cooperation and support by many local computer merchants and service organizations. (Their offers of hardware and software for us to review are much appreciated, and those of us who provide these product reviews take them quite seriously.)

3. We have included features suggested and/or requested by our members. (The Query Column & member classifieds, for instance.)

Of course, this expansion creates additional publication expenses. We discussed the pro's and con's of reducing its size and content, versus trying to generate some advertising revenue in order to make it pay part of its own way. The consensus of opinion seemed to indicate that we should continue expanding our newsletter's size and subject matter while seeking ways to make it, at least partially, self supporting.

LOTUS 123

(continued from page 9)

Finally, find the Percentage tax (column 3 or offset 2). Take that percentage and multiply it by the amount of income above the lower tax bracket (in our example, $\$3,550 - 3,000 = \550 . $\$550.00 * 0.055 =$ Percentage tax) Take the Percentage tax plus the FIXED tax and you have your State Tax Due.

Visually:

```
Annual Pay: Gross*26
Allow Dedct : Deduct*1000
Adjusted Inc: Annual-Allowable
Fixed Annual: @VLOOKUP(ADJ,STATE,1)
Fixed Perc. : @VLOOKUP(ADJ,STATE,2)
State Tax   : (next two lines)
ADJ-@VLOOKUP(ADJ,STATE,0)*PERC+FIXED
```

Notice that the final formula, (State Tax Due), uses an offset of zero (ie \$3,000) to calculate the difference between the Earned income and the tax bracket so the percentage tax can be calculated properly.

This was a simplified example in that there are not any checks to make sure that the taxable income is above zero. If the persons income was only 2000 per year - but he claimed \$14,000 deductions, the value would cause an error in the Vertical table lookup. The key to solving this problem is to use @IF statements to control the flow of the table lookup.

For those interested, a full fledged payroll system, with completed formulas and macros is available for your viewing pleasure. It's capabilities include both Federal and State tax, multiple exemptions, overtime pay calculations, Printable paycheck with stub, General-Ledger style record keeping, year-to-date totals and interactive processing.

If you wish a copy, please send a diskette to Richard Chambers. He will be glad to make a copy for you.

=====
= CLASSIFIED =
=====

FOR SALE

Hayes SMARTCOMM II Communications Package. Version 2.1, never used. \$80 FIRM. Call: Rod Peterson 466-3178 (Nampa), after 6:00 PM.

FOR SALE

Like new!!! Rite-Man LQ Letter Quality parallel printer. With Box and instruction manual. \$190 or best offer. Call: Rod Peterson 466-3178 (Nampa) after 6:00 PM.

FOR SALE

IBM Green Monitor Display. Like New! \$200 or best offer. If interested, Contact: Rod Peterson 466-3178 (Nampa) After 6:00 P.M.

FOR SALE

IBM PCjr with 320K, two disk drives, keyboard cord, 13" monitor, Basic and Manage Your Money Packs, other software negotiable. \$1200 or best offer. Contact Don, 322-7339.

FOR SALE

64k Memory Set for IBM or Compatible computers, \$7.50. Please contact Paul, 322-5653 Days or Evenings.

**** FOR SALE ****

Two Printer Ribbons for a Tandy DWP 210 Printer (still in the Box). Will sell for \$5.00 each. Will also consider trade for IBM software. Call Paul at 384-1022.

******* WANTED *******

Looking for an AST Six-Pac with 64K memory or less. Game Port not required. Contact Rich Brown at 386-5506 Days, or 322-7720 evenings.

**----- FOR MEMBERS ONLY -----
CHRISTMAS PORTRAIT SPECIAL**

2	8x10	@ \$15 ea	\$30
2	5x7	\$10 ea	\$20
8	wallets	\$10 /8	\$10
25	Christmas cards w/envelopes		\$30
	sitting fee		\$35

Regular Price..... \$125
Christmas Portrait Special
Members cost (tax incl.).. \$59
Ed Riche Portraits 342-1546

****** COMPUTER SUPPLIES ******

Matrix Design is a local computer mail order company. They sell both software and hardware and normally offer computer supplies at 20% of list. They have offered our group a discount of 23% of list price. For more information contact Robert Young at (208)385-0383 or write to them at: Matrix Design
814 Mc Kinley Street
Boise, Idaho 83712

IMA

Innovative Micro Assistance

Personal Computer Consulting and Software on Apple, IBM, CP/M, and related Micros. FREE Initial Discussion Session. Group members receive 10% off my customary fee. Contact:

RAY BOWYER (208) 345-2245
P. O. Box 2816 Boise, ID 83701

(Classifieds, Continued)

HALF PRICED HARDWARE AND SOFT

Learned Mahn, a local software development company, is selling some of the software and hardware that they have accumulated for half of what it cost. Some of this is BRAND NEW!

1. PCNet Hard & Software 2 stations
 2. Business Library G/L, A/P, A/R Librarian
 3. Metafile system plus A/R system
 4. Microsoft Pascal Compiler
 5. Champion - acctg. software
 6. Dataflex database
 7. Vision, applications manager and Calc, with no mouse
 8. Visi-Trend Plot
 9. Cylock File Security System
- Interested parties can contact Bob Flagg at Learned Mahn at 336-2281.

LOOKING FOR CO-AUTHOR

I am putting together a book geared to business & professional people. If interested contact Norma Vidinoff, 2253 Spinnaker Circle, Longmont, Colorado 80501.

** FOR SALE **

HP-150 Personal Computer With "Magic Touch" Screen, 256K, 2 SSDD Disk Drives, 160 CPS Graphics Printer. Includes PAM & BASIC. New Condition, used less than 6 hours asking \$3400. Contact Gregg, 922-5664 (Kuna) or at the meetings.

Many members of our group are computer professionals. If you need help chances are there is someone here who can help you. We have consultants who offer discounts to group members.

REVIEW: QMODEM

(continued from page 11)

Now for lighter thoughts and some new things from the BBS world. I've been spending my nickels and dimes, and here are some of the programs I have found:

PC370R11.ARC	S/370 assembler for the IBM PC. Its not that bad.
ARC450.ARC	Archive pgm v4.5 good
ARC450.DOC	Archive pgm doc's
SORTF21.LBR	V Bueg's v2.1 fast
KARKOTH.ARC	Dunjons Adveture C/G needed, very good
CHK4BOMB.ARC	Checks programs to see if they will eat you disk could be very useful.

Until next next month have a good Holiday and a Happy New Year.

A SIXPACK PREDICAMENT

(continued from page 5)

If step #1 has failed, there is likely something wrong with your AST card and you SHOULD take the card to a qualified repairman to have it serviced. Two of our members own shops which specialize in the repair of such equipment. Jack Scott runs SCOTT, INC., an AST, IBM, Epson and Okidata Products Service Center, and new member, Jerry Stom operates IDAHO SERVICE BUSINESS, which specializes in the entire IBM PC line. Both shops are located on Cole Rd., here in Boise.

DBASE II REFERENCE CARD

By Judy M. Robinett

FULL-SCREEN CURSOR MOVEMENT CODES

<ctrl-X> moves cursor DOWN to the next field (also ctrl-F)
<ctrl-E> moves cursor UP to the previous field (also ctrl-A)
<ctrl-D> moves cursor AHEAD one character
<ctrl-S> moves cursor BACK one character
<ctrl-G> deletes character under cursor
<Rubout>
or deletes character to left of cursor
<ctrl-Y> blanks out current field to right of cursor
<ctrl-V> toggles between overwrite and INSERT modes
<ctrl-W> save changes and returns to "." prompt

IN EDIT MODE

<ctrl-U> toggles the record DELETE mark on and off
<ctrl-C> writes current record to disk and ADVANCES to next record
<ctrl-R> writes current record to disk and BACKS to previous record
<ctrl-Q> ignores changes to current record and returns to "." prompt
<ctrl-W> writes all changes to disk and returns to "." prompt

IN BROWSE MODE

<ctrl-B> pans the window RIGHT one field
<ctrl-Z> pans the window LEFT one field

IN MODIFY MODE

<ctrl-T> DELETES current line, moves all lower lines up
<ctrl-N> INSERTS new line at cursor position
<ctrl-C> scrolls down a half page
<ctrl-W> writes all changes to disk and returns to "." prompt
<ctrl-Q> ignores all changes and returns

IN APPEND MODE

<enter> terminates APPEND when cursor is in first position of the first field
<ctrl-W> writes record to disk and moves to next record
<ctrl-Q> ignores current record and returns to "." prompt

KEYS USED WHEN NOT IN FULL SCREEN

<ctrl-P> toggles your printer ON and OFF
<ctrl-R> repeats last executed command
<ctrl-X> clears the command line without executing command
<ctrl-H> backspace
<ctrl-M> same as a carriage return
<ctrl-S> starts/stops output